

ARTMENT OF COMMERCE **Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

FIRST NAMED INVENTOR APPLICATION NO. FILING DATE RONZANI

08/857,273 05/16/97 KPN93-09ACAF

LM02/0202 TT

EXAMINER WU.X

THOMAS O HOOVER HAMILTON BROOK SMITH & REYNOLDS TWO MILITIA DRIVE LEXINGTON MA 02173

ART UNIT PAPER NUMBER 2774

DATE MAILED:

02/02/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

	Application No.	Applicant(s)
Office Action Summary	03/857, 273	
	Examiner	Group Art Unit
	XIAO	Wy 12774
—The MAILING DATE of this communication appears	on the cover sheet b	eneath the correspondence address
Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO I OF THIS COMMUNICATION.	EXPIRE 3	MONTH(S) FROM THE MAILING DATE
 Extensions of time may be available under the provisions of 37 CFR 1.13 from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, such period shall, by default, ex Failure to reply within the set or extended period for reply will, by statute, 	within the statutory minima pire SIX (6) MONTHS from	num of thirty (30) days will be considered timely.
Status		
Responsive to communication(s) filed on	99	
	- 6	
Since this application is in condition for allowance except for accordance with the practice under Ex parte Quayle, 1935 C	r formai matters, prose C.D. 1 1; 453 O.G. 213	ecution as to the merits is closed in 3.
Disposition of Claims		
% Claim(s) $21-29$, $31-4P$, $50-66$,	68-25	is/are pending in the application
Of the above claim(s)		
□ Claim(s)		
X Claim(s) 21-29, 31-48, 50-66, 68	4-85	is/ara rajactad
□ Claim(s)		
☐ Claim(s)—		
Application Papers		requirement.
☐ See the attached Notice of Draftsperson's Patent Drawing R	aview PTO-048	
☐ The proposed drawing correction, filed on		i disapproved.
☐ The drawing(s) filed on is/are objected	to by the Examiner.	
☐ The specification is objected to by the Examiner.		
☐ The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. § 119 (a)-(d)		•
 □ Acknowledgment is made of a claim for foreign priority under □ All □ Some* □ None of the CERTIFIED copies of the □ received. □ received in Application No. (Series Code/Serial Number)_ 	priority documents hav	ve been
☐ received in this national stage application from the Interna	tional Bureau (PCT Ru	ule 1 7.2(a)).
*Certified copies not received:		•
Attachment(s)		
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s)) 🗆 Int	terview Summary, PTO-413
☐ Notice of Reference(s) Cited, PTO-892	· 🗆 No	otice of Informal Patent Application, PTO-152
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948	□ Ot	ther
Office Action Summary		

Serial Number: 08/857,273

Art Unit: 2774

- 1. The request filed on 1/4/99 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. is acceptable and a CPA has been established. An action on the CPA follows.
- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 21-29, 31-48, 50-66, 68-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoolman (U.S. Patent No. 5,281,957) in view of Ohnsorge (U.S. Patent No. 5,485,504), Spitzer (WO 93/18428) and Nathanson (U.S. Patent No. 4,010,322).

Schoolman discloses a portable communication device (or a telephone housing) comprising: a telephone housing (Fig. 4); a receiver (54) within the housing that receives image data; a liquid crystal display (44, 45); a display driver (3); a lens (33, 34) that enlarges an image displayed on the display for viewing by a user; and a display control (3).

It is noted that Schoolman fails to disclose that a wireless transceiver within the telephone housing for transmitting and receiving audio and a wireless receiver within the telephone housing that receives image. Schoolman also fails to disclose the liquid crystal display having an active matrix circuit including an array transistors and an array of pixel electrodes such that the active matrix circuit is bonded to an optically transmissive substrate with an adhesive layer. It is also

Page 3

Serial Number: 08/857,273

Art Unit: 2774

noted that Schoolman fails to disclose a battery carried by the telephone housing for powering the transceiver, the receiver, the display, the light source, and the circuit.

Ohnsorge is cited to teach a telephone device which comprises a wireless transceiver with the telephone housing for transmitting and receiving audio and a wireless receiver within the telephone housing that receives image data.

Spitzer is cited to teach an active matrix display with red, green and blue blacklight sources for a head-mounted display system similar to applicant.

Nathanson is cited to teach a portable telecommunicator device which comprises a power supply (30) for powering the display, transceiver, receiver, light source and circuit within the housing.

It would have been obvious to one of ordinary skill in the art to have modified Schoolman with the features of combining audio wireless transceiver and a wireless image data receiver within the same housing as taught by Ohnsorge, because the wireless audio transceiver and wireless image receiver can provide a mobile communication to the user.

Also, it would have been obvious to one of ordinary skill in the art to have used an active matrix liquid crystal of Spitzer for the liquid crystal display of Schoolman because the active matrix liquid crystal display can provide sharper image than the regular liquid crystal display (e.g. passive type LCD).

Serial Number: 08/857,273

Page 4

Art Unit: 2774

Furthermore, it would have been obvious to one of ordinary skill in the art to use an internal power source within the housing as taught by Nathanson so as to provide a mobile function of the telephone unit.

4. Applicant's arguments filed 6/5/98 have been fully considered but they are not persuasive.

Applicant argues that Schoolman is not wireless. This is true, however, wireless telephone in combination with display is well known in the art such as taught by Ohnsorge. The combination of Schoolman and Ohnsorge would provide a LCD display integrated in a telephone unit. Applicant also argues that the batteries used in Nathanson is for CRT and a LCD. This argument is not persuasive because both Nathanson and Schoolman as modified are directed to a portable display device, it is obvious to use batteries for any kind of portable display devices. Applicant further argues that there is no suggestion of the display and lens located in a display module which rotates relative to the telephone housing. This argument is not persuasive since this limitation is not found in claims.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiao Wu whose telephone number is (703) 305-4721. The examiner can normally be reached on Monday to Friday from 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709.

Serial Number: 08/857,273

Art Unit: 2774

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 308-6606 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

xw

January 29, 1999

XIAO WU PRIMARY EXAMINER ART UNIT 2774